

UNIFORM STANDARD DETAILS

for

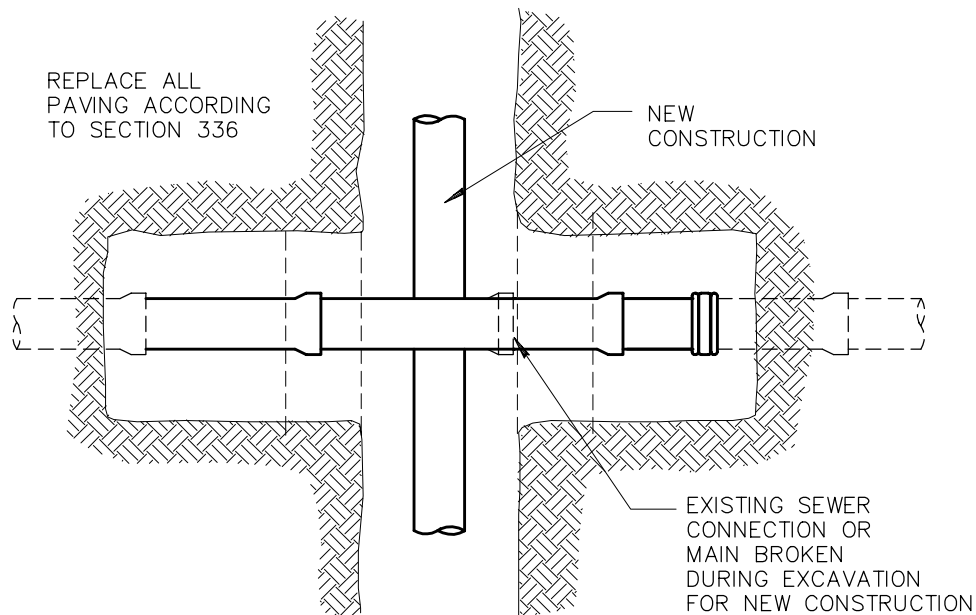
PUBLIC WORKS CONSTRUCTION

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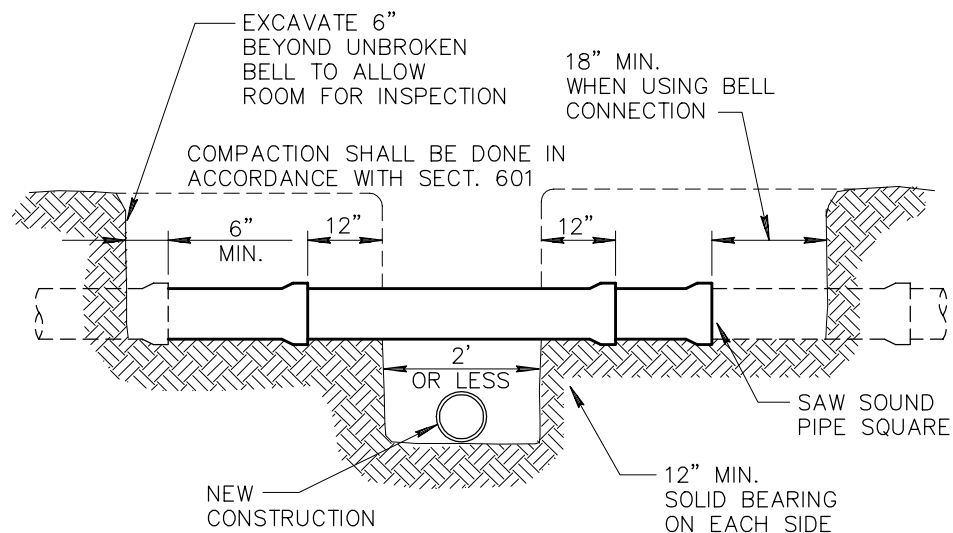


**1998
ARIZONA**

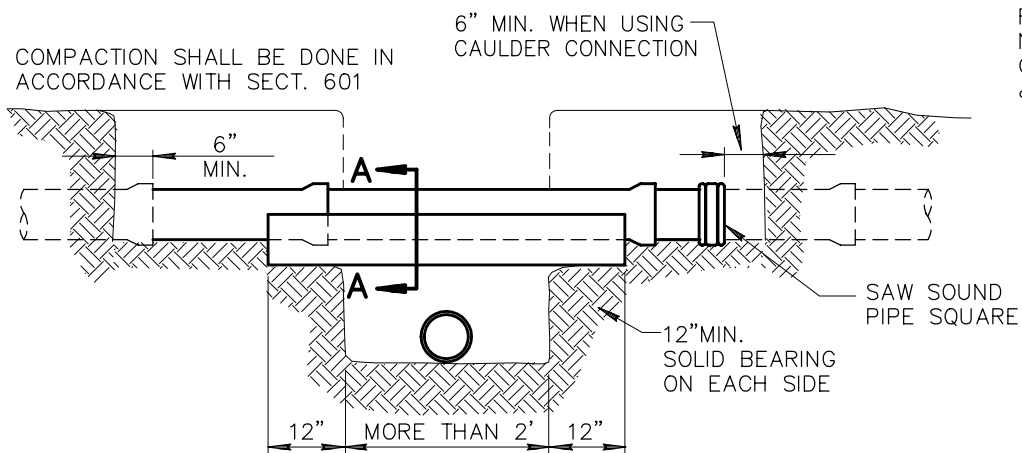
(Includes Revisions Through 2004)



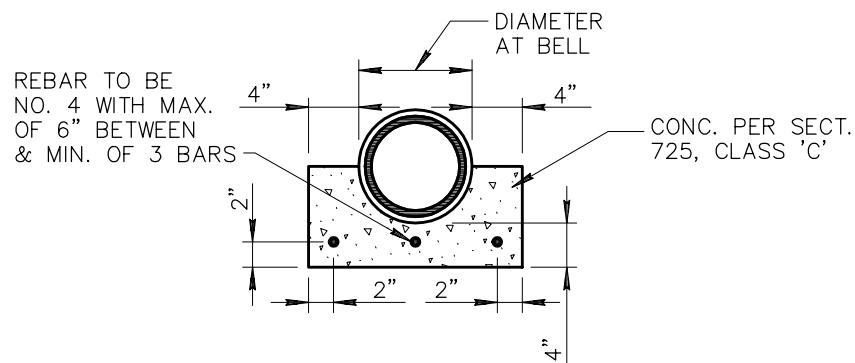
PLAN VIEW OF REPLACEMENT



**REPLACEMENT WHEN NEW TRENCH
2' WIDE OR LESS**



**REPLACEMENT WHEN NEW TRENCH
MORE THAN 2' WIDE**



SECTION 'A-A'

NOTES:

1. BROKEN PIPE SHALL BE REPLACED WITH A MINIMUM OF ONE FULL JOINT AND TWO SHORT LENGTHS WITH UNBROKEN BELLS. CONSTRUCTION AND JOINTS TO BE MADE AS PER SECTION 615.

DETAIL NO.

405



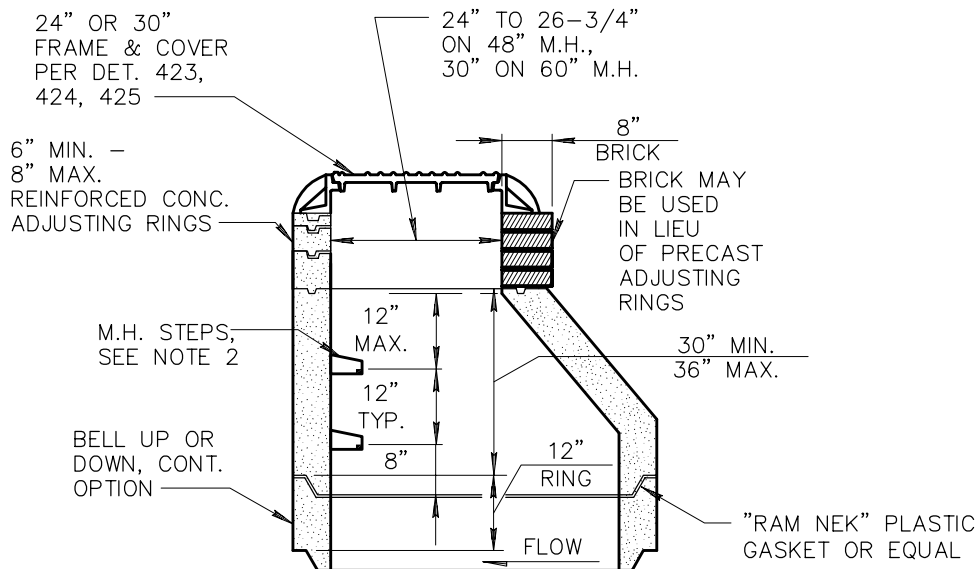
STANDARD DETAIL
ENGLISH

BROKEN SEWER LINE REPLACEMENT

REVISED

DETAIL NO.

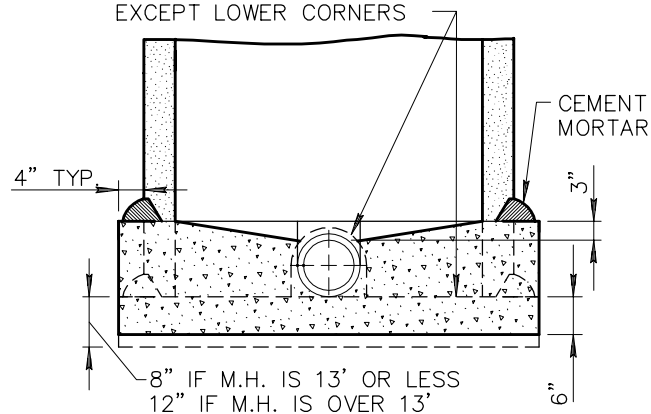
405



TYPE 'A' TOP

(PRE-CAST ECCENTRIC CONICAL TOP M.H.)

** ALTERNATE BASE
WITH KNOCKOUTS FOR PIPES.
CLEARANCE AROUND PIPES
1\" MIN. - 3\" MAX.
EXCEPT LOWER CORNERS



NOTES:

1. PRE-CAST, REINFORCED M.H. SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH A.S.T.M. C-478 EXCEPT AS MODIFIED HEREIN.
2. M.H. STEPS SHALL BE INSTALLED AT SITE OF M.H. SECTION MANUFACTURE. MINIMUM CLEARANCE EACH SIDE OF M.H. LEG SHALL BE 1\". STEPS SHALL BE MOUNTED WITH 2 TO 1 SAND/CEMENT DRY PACK MORTAR. (SEE DET. 428 FOR M.H. STEP.) STEPS REQUIRED IN 48\" DIAMETER MANHOLE. STEPS NOT REQUIRED IN 60\" DIAMETER MANHOLE.
3. USE LOW ALKALI CEMENT ONLY.

DETAIL NO.

420-1



STANDARD DETAIL
ENGLISH

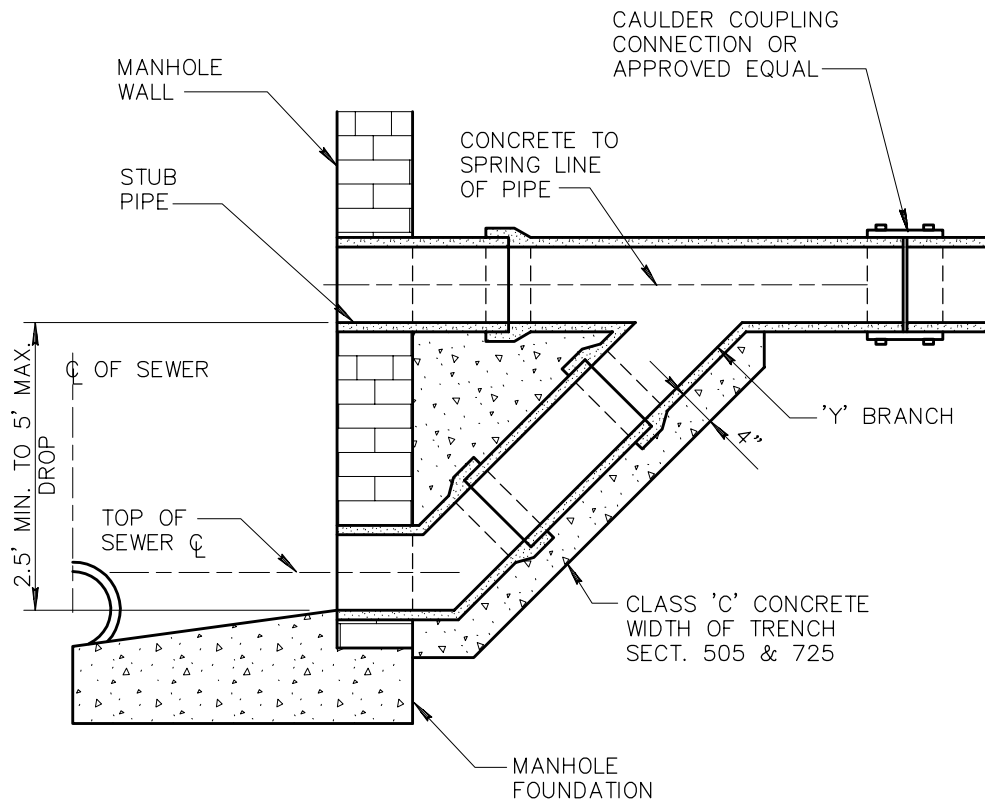
PRE-CAST CONCRETE SEWER MANHOLE

REVISED

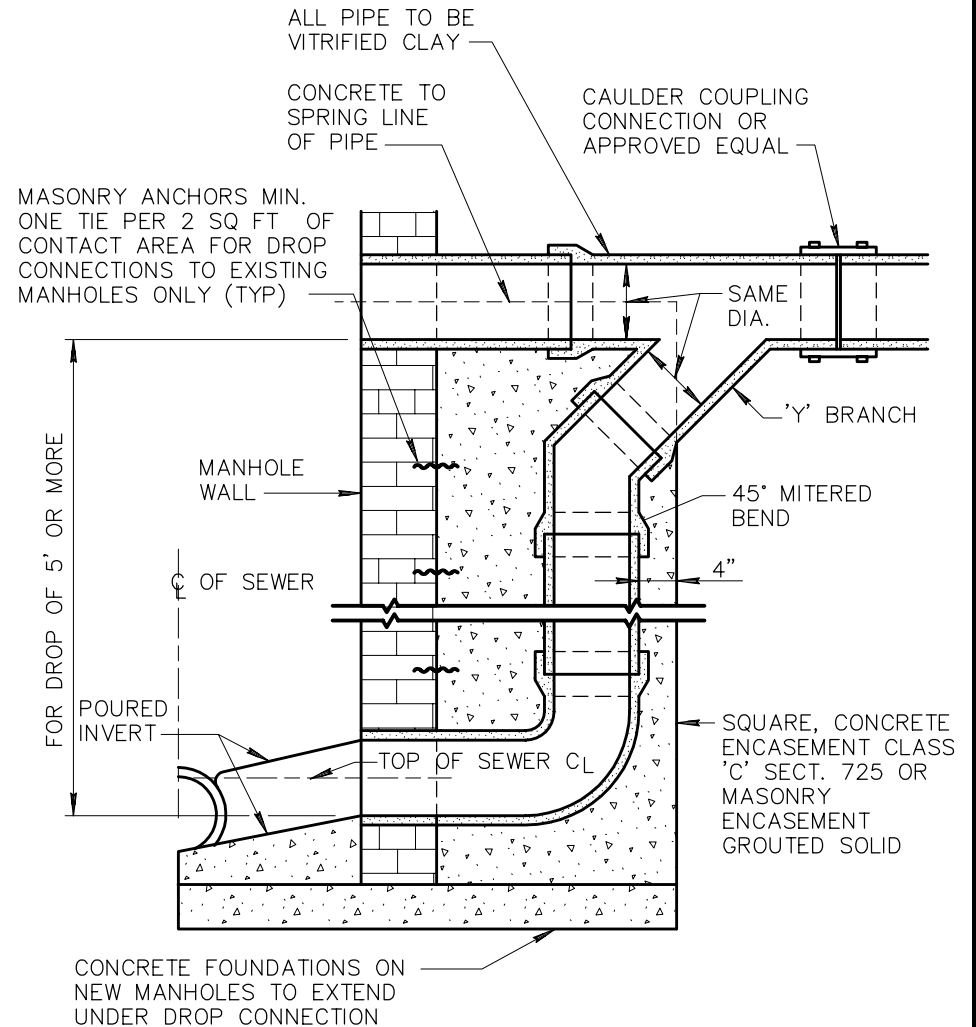
01-01-2004

DETAIL NO.

420-1



TYPE A
2.5' TO 5' DROP



TYPE B
5' OR MORE

DETAIL NO.

426



**STANDARD DETAIL
ENGLISH**

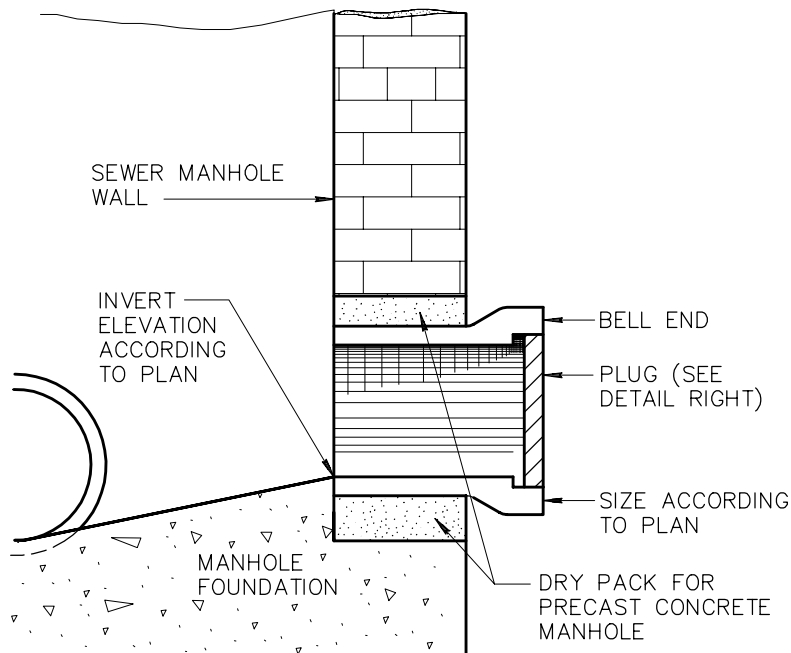
DROP SEWER CONNECTIONS

REVISED

01-01-2004

DETAIL NO.

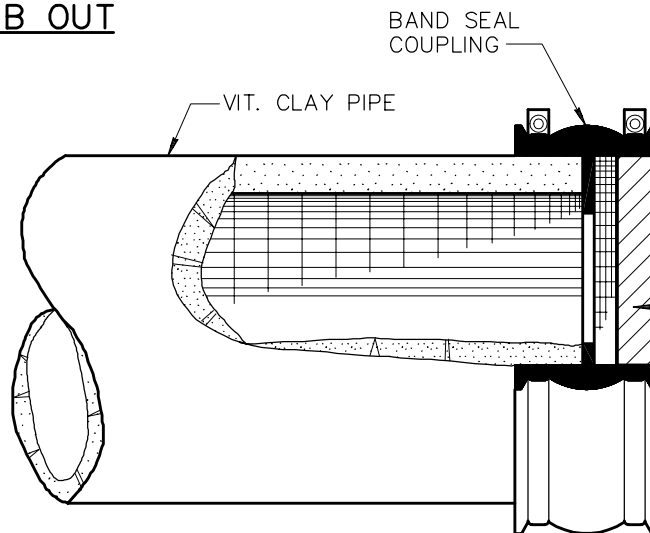
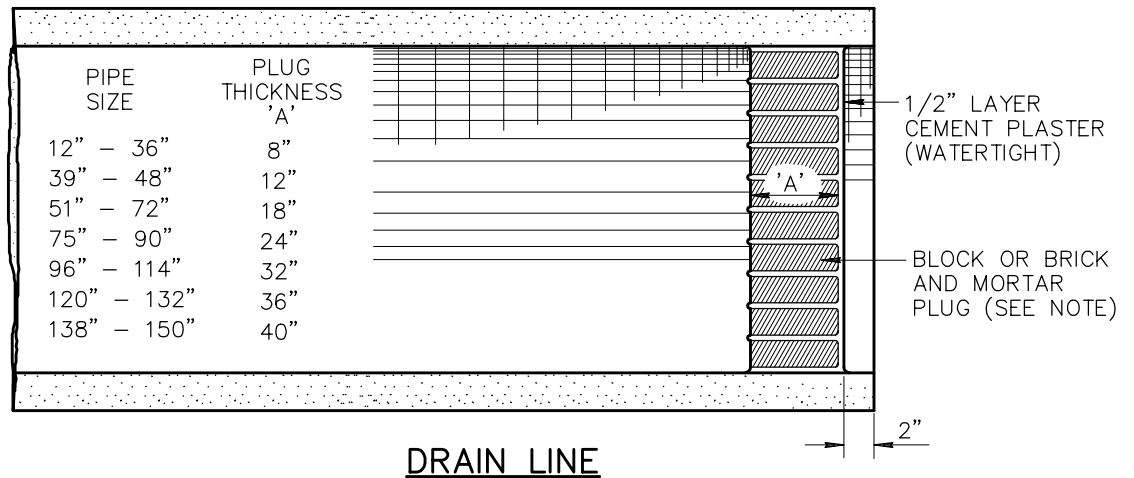
426



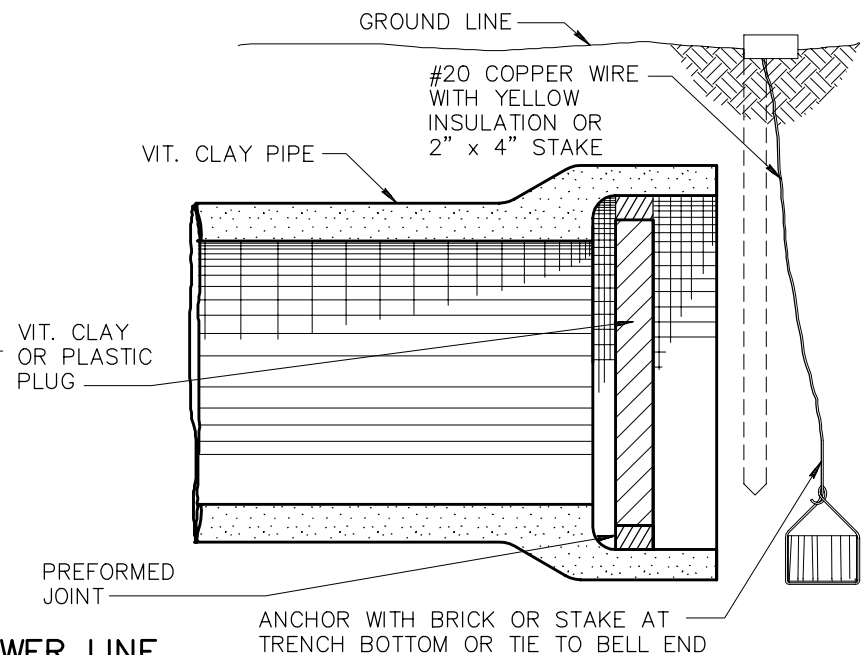
TYPICAL STUB OUT

NOTES:

1. NOTE: COMPACT SOIL AT END OF PIPE TO 95% OF MAXIMUM DENSITY.
2. IF DEPTH OF COVER IS LESS THAN 5' OR GREATER THAN 10' INCREASE PLUG THICKNESS A MIN. OF 4".



SEWER LINE



DETAIL NO.

427



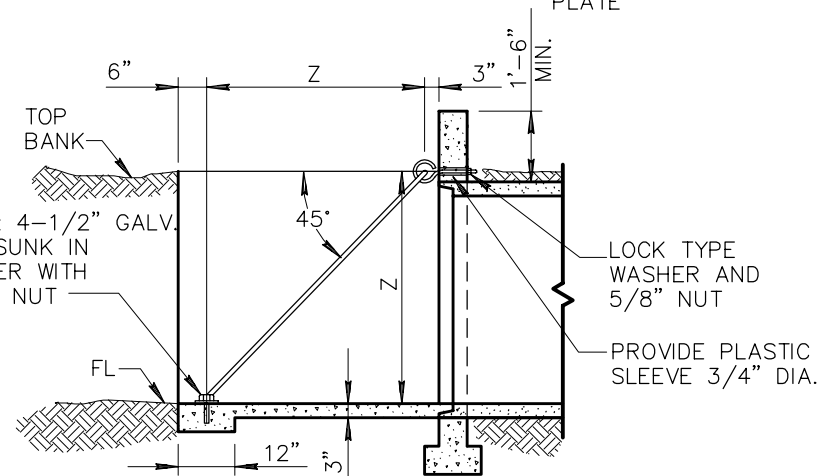
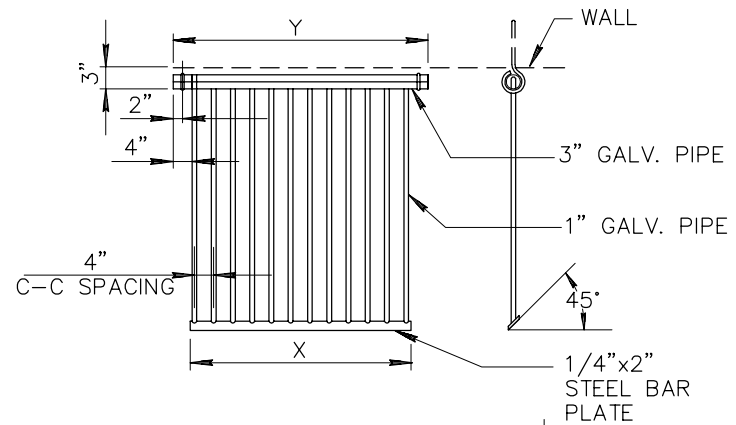
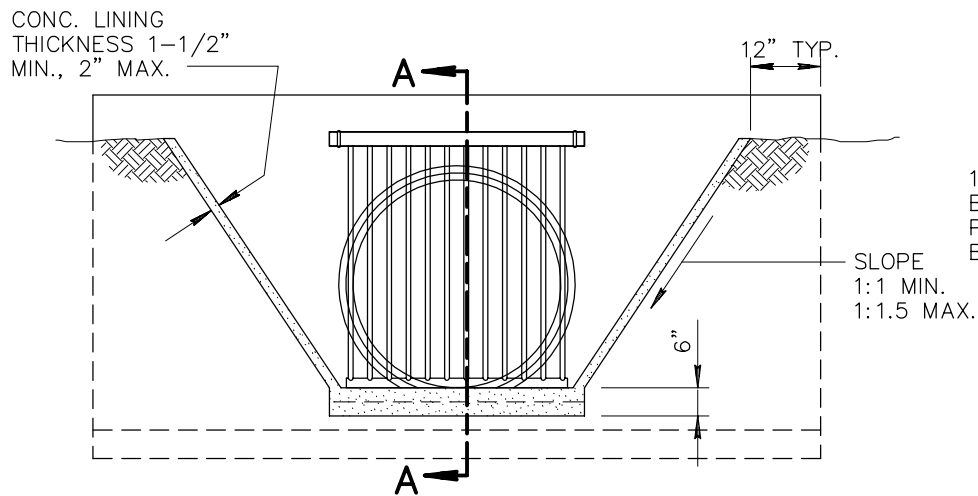
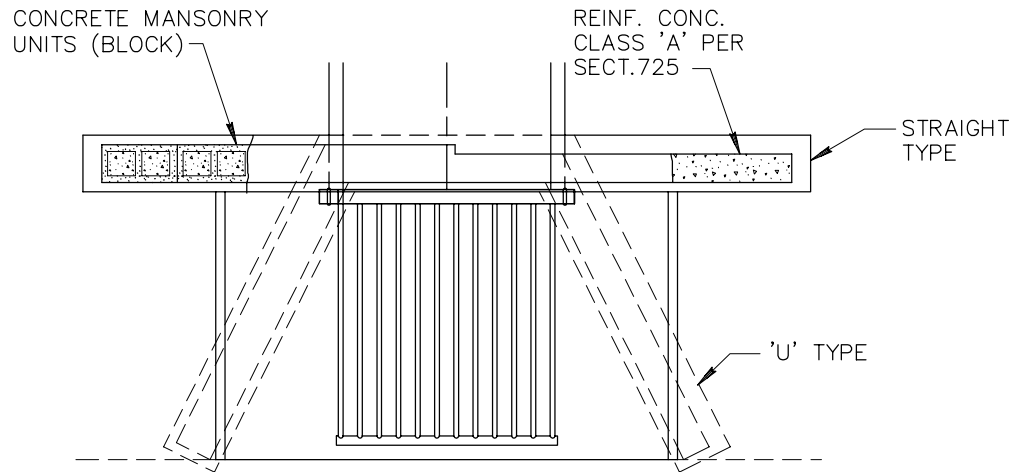
STANDARD DETAIL
ENGLISH

STUB OUT AND PLUGS

REVISED

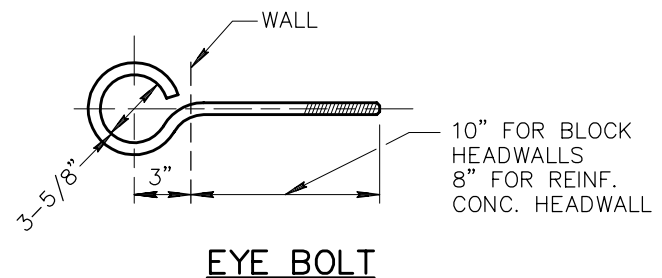
DETAIL NO.

427



SECTION A-A

TYPE BASED ON PIPE SIZE						
TYPE	PIPE SIZE	NO. OF BARS	LENGTH OF BARS	DIMENSIONS		
				X	Y	Z
A	18"	6	3'-7"	1'-9"	2'-5"	2'-5"
	24"	8	3'-7"	2'-5"	3'-1"	2'-5"
B	30"	10	4'-4 1/4"	3'-1"	3'-9"	2'-11 1/2"
C	36"	10	5'-1 1/2"	3'-1"	3'-9"	3'-6"
D	42"	12	5'-10 5/8"	3'-9"	4'-5"	4'-0 1/2"
E	48"	14	6'-7 3/4"	4'-5"	5'-1"	4'-7"



DETAIL NO.

502-2



STANDARD DETAIL
ENGLISH

TRASH RACK

REVISED

01-01-2004

DETAIL NO.

502-2

NOTE:
PAINT COVER BOTH SIDES
ONE PRIME COAT, TWO
FINISH COATS, SECT.
790, PAINT NO. 9

10 GAUGE SHEET
STEEL COVER

HANDLE EXTENDS
6" BELOW
TOP WHEN GATE
IS OPEN

STANDARD
CONCRETE
PIPE

CONCRETE AS
REQUIRED TO
SECURE GATE

FINISH
GRADE

VARIABLE

(2) 5/16"
HOLES
4" O.C.

2-1/2"

1/4" ROD
HANDLE

2-1/2"

30"
UNLESS OTHERWISE
SPECIFIED

GROUT JOINTS
WATER TIGHT

GATE TYPE,
SIZE AND NO.
REQUIRED AS
GIVEN ON PLANS

SIZE OF PIPE
AS SHOWN
ON PLANS

TYPE 'A'

NOTES:

1. BRACE TO BE INSTALLED EVERY 2' FROM TOP OF HEADGATE FRAME. BOTTOM BRACE TO BE HIGH ENOUGH TO ENABLE FULL OPENING OF HEADGATE.
2. INSTALL 1/2" BOLTS INTO LEAD PLUG DRILLED TO WITHIN 1" OF OUT SIDE OF STANDPIPE. SPACERS TO BE INSTALLED AT EACH BOLT BETWEEN HEADGATE FRAME AND INSIDE OF STAND PIPE.
3. LOCATION OF 2" HOLE FOR GATE STEM TO BE DETERMINED AFTER INSTALLATION OF GATE.
4. CONCRETE SHALL BE CLASS A PER SECT. 725.

PAINT ARROW ON OUTSIDE OF STANDPIPE INDICATING DIRECTION "TO OPEN" HEADGATE.

SEE NOTE 2

SEE NOTE 1

GROUT JOINTS
WATER TIGHT

18"
MIN.

SIZE OF
PIPE AS
SHOWN
ON PLANS

FORM CONC. AROUND
END OF PIPE BEHIND
HEADGATE FRAME

SEE NOTE 3

(4) 3/8" BOLTS TO BE
GROUTED INTO STANDPIPE
EQUI-DISTANT WITH
1-1/2"x3" RECTANGULAR
WASHERS AND NUTS

GALVANIZED EXPANDED
METAL LID (9 GAUGE)

REINF. CONC.
PIPE

VARIES
48" MIN.
52" MAX.

FINISH
GRADE

1" C.R.S.
LIFT ROD

HEADGATE TO
BE SWANSON
800 SERIES
OR APPROVED
EQUAL

4"
4"

TYPE 'B'

DETAIL NO.

503



STANDARD DETAIL
ENGLISH

IRRIGATION STANDPIPE

REVISED

DETAIL NO.

503